

A<sup>1</sup>

and potential AI cleavage site. That same region (*italics, underlined*) exhibits significant homology with the insulin/IGF-1 chimeric receptor. There are 17 potential glycogen synthase kinase-3, protein kinase C, or cAMP or Ca-dependent kinase II phosphorylation motifs and one transforming growth factor (tgf) motif (double underlined). The embolded amino acid sequences exhibit significant homology with the A4 alternatively spliced mutant form of NF2,  $\beta$  subunit of integrin, and human decay accelerating factor 2 precursor. The boxed amino acid sequences exhibit significant homology with human integral membrane protein and myelin oligoglycoprotein-16.

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Please substitute the following paragraph for the pending first full paragraph at page 8 of the specification:

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Figs. 2A-2F depict AD7c-NTP expression *in vitro* and *in vivo*. (2A): Recombinant protein detected by *in vitro* translation using sense strand cRNA transcripts. (2B): Western blot analysis of purified recombinant protein demonstrating specific immunoreactivity with the Tag and N3I4 AD7c-NTP monoclonal antibodies, but not with non-relevant FB50 monoclonal antibody. (2C): Western blot analysis of BOSC cells stably transfected with pcDNA3-AD7c-NTP or pcDNA3 (empty vector). The blots were probed with the N3I4 AD7c-NTP antibody. (2D): Significantly increased levels of the 41-45 kD AD7c-NTP protein in AD frontal lobe relative to age-matched control frontal lobe tissue. Similar results were obtained for temporal lobe tissue. (2E): Higher levels of the 41-45 kD and 19-21 kD AD7c-NTP proteins in late, end-stage (L) AD

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compared with early, less symptomatic (E) AD. All tissue samples were taken from the frontal lobe. Note the clusters of 3 or 4 bands between ~41 and ~45 kD, probably corresponding to different degrees of phosphorylation. (2F): Western blot analysis of postmortem ventricular fluid demonstrating higher levels of the ~41 kD AD7c-NTP molecules in AD compared with aged control samples using the N3I4 antibody. The ~28-30 kD band may represent a degradation product. Also note detection of the ~19-21 kD N3I4-immunoreactive molecules in AD.

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202260-244960  
Please cancel the existing Sequence Listing for the above-identified application and replace it with the substitute Sequence Listing appended hereto.

***In the Claims***

Cancel claims 1-32, and 34 without prejudice to or disclaimer of the subject matter therein.

Please substitute the following claim 33 for pending claim 33:

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A<sup>3</sup>  
33. A method to treat or prevent dementias of the Alzheimer's type of neuronal degeneration comprising administering to an animal in need thereof an antisense oligonucleotide which is complementary to an NTP mRNA sequence corresponding to nucleotides 150-1139 of Seq. ID No. 1, a ribozyme comprising a target sequence which is complementary to an NTP mRNA sequence corresponding to nucleotides 150-1139 of Seq. ID No. 1, a triple helix-forming oligonucleotide with the a region of